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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,106	08/17/2006	Toshiya Takahashi	70404.109/ha	1079

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EXAMINER	
OLSEN, LIN B	
ART UNIT	PAPER NUMBER
3661	

NOTIFICATION DATE	DELIVERY MODE
10/07/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/598,106	TAKAHASHI ET AL.	
	Examiner	Art Unit	
	LIN B. OLSEN	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on August 17, 2006 was filed before the mailing date of the first action on the merits. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 13 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims fail to define a statutory process. There does not appear to be sufficient structural and functional interrelationships between the computer program and other claimed elements of a computer or processor which permit the computer program's functionality to be realized. For the claim to be statutory there is a requirement that there be a functional interrelationship among the data and the computing processes performed when utilizing the data. A process

consisting solely of mathematical operation does not manipulate appropriate subject matter and thus cannot constitute a statutory process.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims **1, 8 and 9** are rejected under 35 U.S.C. 102b as being anticipated by U.S. Patent Pub. No. 2003/0080877 to Takagi et al. Takagi is concerned with displaying relevant images on an in-cabin display during parallel parking of a vehicle by the operator. Claim 1 is an apparatus claim while claims 8 and 9 are methods of using the apparatus.

Regarding independent **claims 1, 8 and 9**, "A surroundings exhibiting system that is provided in a transportation device requiring manual maneuver and that shows, to an operator, surroundings of the transportation device in a stop state, the surroundings exhibiting system comprising:" - The recitation that the surroundings of the transportation device are displayed from the stop state has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for

completeness upon the introductory clause. *Kropa v. Robie,* 88 USPQ 478 (CCPA 1951)

"an image capturing section for capturing a multi-directional image of the surroundings of the transportation device; and" - As shown in Takagi Fig. 1, four cameras 52, 54, 56, and 58 capture images toward the front, back, and side (paragraph 44).

"a display section for displaying at least part of the image captured by the image capturing section." – As shown in Fig. 1, display 60 displays one of the images captured.

Claim Rejections - 35 USC § 103

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim **2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi as applied to claim 1 above, and further in view of U.S. Patent Pub. No. 2002/0080017 to Kumata et al. Kumata is concerned with surveying the area around a vehicle using an omnidirectional camera system.

Regarding **claim 2**, which is dependent on claim 1, wherein:

"the image capturing section captures an omnidirectional image with respect to the transportation device." - While Takagi used multiple cameras to view the region of the vehicle, Kumata teaches using cameras that view omnidirectionally (Fig. 3, paragraph 83). It would have been obvious to one of ordinary skill in the art at the time of the invention to perform a simple substitution of the known omnidirectional camera of Kumata for the multiple cameras of Takagi to yield the predictable results of images of various portions of the vehicle.

Claims **3 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi as applied to claim 1 above, and further in view of U.S. Patent Pub. No. 2002/0128769 to Der Ghazarian et al. (Der Ghazarian) and U.S. Patent No. 6,675,006 to Diaz at al (Diaz). Diaz and Der Ghazarian are concerned with monitoring a vehicle for security purposes.

Regarding **claims 3 and 10**, which are dependent on claims 1 and 9 respectively, further comprising:

"an ignition instruction detection sensor for detecting an operator's ignition instruction to the transportation device," – Takagi does not explicitly mention detecting the ignition instruction to the vehicle, although it does monitor the ignition state (Paragraph 47) Der Ghazarian, monitors a number of sensors including the ignition being turn on (paragraph 64) It would have been obvious to one of ordinary skill in the art at the time of the invention to monitor the ignition switch as known in the art to obtain predictable results of complete monitoring of the system.

"the image capture by the image capturing section being carried out in synchronization with the ignition instruction." – Der Ghazarian does not use video surveillance to monitor the vehicle. In Diaz col.3 lines 38-40 uses a camera that is monitoring the interior of the vehicle to captures an image on detecting an abnormality, such as the ignition instruction of Der Ghazarian. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the image capture on abnormality of Diaz to trigger the camera of Takagi based on the same conditions, so that the state of the vehicle prior to movement was known.

Claims **4 and 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi/as applied to claim 1 above, and further in view of Abstract of Japanese Publication JP 2005014812 to Torii (Torii) and U.S. Patent No. 6,675,006 to Diaz at al

(Diaz). Diaz is concerned with monitoring a vehicle for security purposes. Torii discusses a vehicle rear displaying device.

Regarding **claim 4**, which is dependent on claim 1, further comprising:

"a door unlock detection sensor for detecting unlocking of a door," – Takagi does not discuss detecting the unlocking of the vehicle door, but Torrii, in the second line of the Solution section uses unlocking of a door as a trigger signal to a processor, illustrating that such monitors are known.

the image capture by the image capturing section being carried out in synchronization with the unlocking of the door." - In Diaz col.3 lines 38-40, the detection of an abnormality is used to trigger the capture of a camera image. It would have been obvious to one of ordinary skill in the art at the time of the invention to use Diaz' trigger based on the detection of the unlocking of the car to turn on the cameras of Takagi – to yield the predictable result of image capture that will be available when the operator enters the vehicle.

Regarding **claim 5,** which is dependent on claim 1, further comprising:

"a door open/close sensor for detecting opening or closing of the door,

the image capture by the image capturing section being carried out in synchronization with closing or opening of the door." Diaz col. 4, lines 41 monitors a door sensor as an abnormality. It would have been obvious to one of ordinary skill in the art at the time of the invention to use this sensor to turn on Takagi's cameras to yield the predictable result of images available when the operator entered the vehicle.

Claims **6, 7 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi/ Torii/ Diaz as applied to claim 4 above, and further in view of U.S. Patent Pub. No. 2003/0222983 to Nobori et al. (Nobori). Nobori is concerned with a vehicle surroundings monitoring device that manipulates the images as well as displaying them.

Regarding **claim 6**, which is dependent on claim 4, further comprising:

"a frame memory for storing image data of the image captured by the image capturing section; and" - Takagi Fig. 1 does not illustrate a frame memory for storing the images form a camera. Nobori however, shows in Fig. 1 that each camera feeds a frame memory (13a, b,) before the images are manipulated. Further, the composite image created in Nobori is fed through another frame memory (18) before being displayed. Hence in its simplest form, the system of Nobori merely passes through an image. It would have been obvious to one of ordinary skill in the art at the time of the invention to meld the frame memories of Nobori with Takagi's simple system to combine the prior art elements using known methods to yield the predictable result of a being able to display save an image captured for a time.

"an ignition instruction detection sensor for detecting an operator's instruction to the transportation device," – the Torii ignition detector satisfies this.

"the image data of the image captured by the image capturing section being stored in the frame memory, and" – Nobori Fig. 1 shows this.

"a most recent image data among the image data stored in the frame memory being displayed on the display section upon the detection of the ignition instruction." -

The Takagi/Torii combination captured the image data based on the ignition recognition. The addition of Nobori's frame memory integrates well with this system.

Regarding **claims 7 and 11**, which are dependent on claims 4 and 9 respectively, further comprising:

"an ignition instruction detection sensor for detecting an operator's instruction to the transportation device," - – the Torii ignition detector satisfies this.

"the image captured by the image capturing section being displayed on the display section upon the detection of the ignition instruction." – Takagi Fig. 1 shows an image switcher directing an image to the display based on a condition from the comparing unit. In the Takagi/Torii/Diaz device the ignition detector switch substitutes for this input.

Claims 12 and 14 are rejected at least because they depend on a rejected claims.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 7 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 28 of copending Application No. 10/598,098 to Yamamoto et al, assigned to common assignee Sharp Kabushiki Kaisha, published as U.S. Patent Pub. No. 2008/0150709. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 7 could be interpreted to anticipate claim 28.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 6,580,373; U.S. Patent Pub. No. 2003/0085999; U.S. Patent Pub. No.2003/0095182; U.S. Patent Pub. No.2004/0196368; U.S. Patent Pub. No.2005/-174429 and WO 2005/021330

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LIN B. OLSEN whose telephone number is (571)272-9754. The examiner can normally be reached on Mon - Fri, 8:30 -5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lin B Olsen/
Examiner, Art Unit 3661

/Thomas G. Black/

Supervisory Patent Examiner, Art Unit 3661